UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,138	04/29/2002	Kelvin Stott	P67517USO	8172

136 7590 11/03/2004

JACOBSON HOLMAN PLLC
400 SEVENTH STREET N.W.
SUITE 600
WASHINGTON, DC 20004

EXAMINER	
LIU, SAMUEL W	

ART UNIT	PAPER NUMBER
1653	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/030,138	STOTT, KELVIN	
	Examiner	Art Unit	
	Samuel W Liu	1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26 and 44* is/are pending in the application.

4a) Of the above claim(s) *27-40 and 42-44* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26 and 41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of the claims

Claims 1-44 are pending.

Applicants' preliminary amendment filed 28 January 2002, which amends claims 3-4, 6, 8-10, 12, 14-17, 19-20, 22-25 and 27-42 has been entered.

Election/restriction

Applicants' election (filed 24 September 2004) with traverse of Group I, claims 1-26 and 41 is acknowledged. The traversal is on the grounds that (i) the Quibell's composition which is employed to prevent aggregation is to position AcHmb substituents on both edges of the β-amyloid (see the 2nd paragraph, page 3); (ii) the Quibell's composition does not comprises at least one Nα-substituent as the current invention (see the 3rd paragraph, page 3); and, (iii) the Quibell's composition comprises α-D-amino acids which is naturally-occurring ones but not non-natural ones as set forth in current invention (see the bridging paragraphs on pages 3-4).

The Applicant's traversal has been fully considered but it is not persuasive because (i) the Quibell's β-structural composition comprises the Nα-substituents essentially on C-terminal region of polypeptide (depicted on page 2020); and (ii) the β-strand-forming section of the Quibell's composition comprises at least one Nα-substituent. Quibell et al. do not expressly teach that this Nα-substituent is Nα-substituted α-D- amino acid residue. It would have been obvious for a person of ordinary skill in the art to incorporate said D-amino acids into the Quibell's composition, because (i) Findeis M. A. et al. (US Pat. No. 5854204, *issued 29 December 1998*) teach sequence, e.g., "LVFF" all of which consist of α-D- amino acid residues

(see PPI-433 on Table V of 5854204); note that this sequence is in the Quibell's sequence (residues 17-20) and that both Quibell and Findeis compositions are directed to $A\beta_{1-40}$ (i.e., 1-40 amino acid residues of β-amyloid (Aβ) polypeptide) (see Examples 10-11 of 5854024); (ii) in *Example 11*, Findeis et al. has taught that the "LVFF" sequence can be further modified by N-methylation; (iii) like the current disclosure, the Findeis's amyloid modulator compound is employed to directly interact natural amyloid proteins or peptides and thus inhibit the aggregation of amyloidogenic proteins or peptides (see "*abstract*" and "*Summary of the Invention*" on column 3 of 5854024) which is the subject matter of Quibell as well; and (iv) furthermore, Findeis et al. has taught an advantage of Nα-substation, i.e., to introduce additional satiric hindrance to the aggregation of natural amyloid proteins when the said amyloid modulator compounds of this type interact with natural amyloid (see column 24, lines 29-33). Therefore, the skilled artisan would have prepared the amyloid modulators which comprises at least four consecutive α-D- amino acid residues of which one or more residues undergoes Nα-substitution in order to enhance an inhibitory capability of the said amyloid modulator compounds.

Moreover, Findeis, M. A. et al. (US Pat. No. 6610658) anticipate the instant claims 1, 4-26 and 41 of the current application (se the following statement of the rejection under 35 U.S.C. 102(e).

Thus, the claimed composition does not constitute a special technical feature linking all claims, as defined by PCT Rule 13.2 and 37 CFR 1.475(a), as a single contribution over the art, and a holding of lack of unity is therefore proper. Therefore, the requirement is still deemed proper.

The pending claims 1-26 and 41 of Group I are examined in this Office action. Claims 27-40 and 42-44 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected inventions.

IDS

The references listed in the IDS filed 5 August 2003 and the IDS filed 10 June 2002 have been considered by Examiner. Note that Examiner cannot find the reference denoted "AD" in the IDS filed 5 August 2003. Applicant is invited to submit the indicated reference thereof.

Specification/Claim/ Objections

The disclosure is objected to because of the following informalities:

In page 4, line 24, "SEQ. ID. NO. 1" should be changed to "SEQ ID NO:1". The similar change should be made throughout the specification.

In page 4, line 34, "SEQ ID NO:3" should be inserted after "KKLVFFA"; the same change should be made throughout the specification.

In page 9, line 30, "COO" should be changed to "COOR"; line 31, change "COS" to "COSR", and after "COS" insert "(thioester)"; and, line 31, "CSS" should be pointed out for what kind of compound it stands, and after "CSS" "(thioester)" should be deleted because "CSS" does not stand for thioester.

In page 17, line 6, "monomers are amino-acids and" is suggested to change to "amino acid residues" because the term "monomers" are NOT commonly accepted term for describing amino acids of polypeptide.

In clam 1, "α-L-amino-acid" should be changed to ""α-L-amino acid" since

"amino-acid" is not commonly accepted form. The same change should be made for claims 2-26.

In claim 7, ""β-sheet propensity" should be changed to "β-structure propensity" because β-structure encompasses β-sheet.

Claims 15 and 16 are objected to as non-compliant with 37 C.F.R. 1.821 (d). The "SEQ ID NO:_" is missing from the claims after the peptide sequence "KLVFFAE".

In claim 21, "inclusion" should be changed to "incorporation".

In claims 23 and 24, "SEQ. ID. NO." should be changed to "SEQ ID NO:".

In claim 26, "COO (ester)" and "CSS (thioester)" should be changed to "COOR (ester)" and "CSSR (thioester)", respectively.

Appropriate correction is required.

Claim Rejections - 35 USC § 112, the second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

Claims 1-26 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "Nα substituted" (line 10); the recitation is not apparent as to whether or not it refers to (i) substitution at *alpha* amine group of N-terminus, or (ii0 at peptide backbone amine group, or (iii) given substituted, whether or not it refers to (a) Nα-substituted α-**D**-amino-acid residues, or (b) Nα-substituted α-L-amino-acid residues or (c) a mixture of (a) and (b) thereof. Note that the specification does not define "Nα" moiety. Claim 1 recites "peptide-containing molecule"; it is unclear as to whether or not peptide contains the molecule, or

molecule comprises the peptide. Claim 1 recites "and any two successive..." (line 11); the recitation is indefinite because "and" (line 11) renders the claim indefinite because this "and" is in conflict with the "and" on line 10 of the claim. In addition, claim 1 is indefinite in the recitation "*the β-strand forming section of peptide comprises a sequence of at least four consecutive α-D-amino acid residues*" and the recitation "*any two successive Nα-substituted α-D-amino acid residues are separated by an odd number of consecutive Nα-unsubstituted α-D-amino- acid residues*"; theses two recitations are contradictory from each other since here said "odd number of consecutive" refers to at least three consecutive residues which is set forth in a combination with "any two successive residues"; and thus, the β-strand forming section comprises at least **five** (3 + 2 =5) α-D-amino acid residues. This is inconsistent with the recitation "at least **four** consecutive α-D amino acid residues". Please note that in the above-mentioned "Nα-substituted" (the bridging lines 11-12) does not appear apparent as being different from the phrase "Nα-substituted" set forth in line 10 of the claim. Further, claim 1 recites the limitation "the Nα-substituent(s) (see line 14 of the claim); there is insufficient antecedent basis for this limitation in the claim. The dependent claims are also rejected.

Claim 2 recites "Nα-unsubstituted amino-acid residues"; the recitation is not apparent as to whether or not it refers to (i) Nα-unsubstituted α-D-amino-acid residues, or (ii) Nα-unsubstituted α-L-amino-acid residues or a mixture of (i) and (ii) thereof.

Claim 3 appears to be missing "the" or "said" before "successive Nα-substituted α-D-amino-acid residues" otherwise claim is indefinite. Also, the recitation "Nα-substituted α-D-amino-acid residues" per se is not quite clear because claim 1 from which claim 3 depends

recites "Nα substituted α-D-amino-acid residues (note that there is not "hyphen " "-" between "Nα" and "substituted").

Claim 4 recites "with another β-strand"; the recitation is unclear as to whether or not another" refers to the β-strand of the claimed compound or a β-strand of natural protein or peptide (e.g., β-amyloid molecule). Also, claim 4 lacks sufficient antecedent basis for the recitation "the Nα-substituent" in claim 1 from which claim 4 depends.

Claim 6 recites "the side chain": there is no antecedent basis for this recitation in claim 1 from which claim 6 depends.

Claim 8 appears to lack sufficient antecedent basis for the recitation "β-strand forming" in claim 6 from which claim 8 depends. Note that there is not "hyphen " "-" between ""β-strand" and "forming" in the claim8 recitation.

Claim 10 recites "the side chain": there is no antecedent basis for this recitation in claim 1 from which claim 10 depends. Also, claim 10 recitation "hinders the stacking of β-sheets" appears to be vague because said stacking …" has not been mentioned in claim 1 from which claim 10 depends; and thus, deletion of "the" is required". Further, the phrase "stacking of β-sheets" appears to be inappropriate because D-amino acids are also able to inhibit stacking of other β-structures, e.g., β-turn. Suggest "stacking of β-structures" or "stacking of β-strands".

Claim 11 is indefinite in "the side chain …. extends beyond the neighboring side chains" because the phrase "extends beyond" is unclear as to whether or not it refers to the size of said side chain extends beyond the neighboring side chains, or a chemical interaction of said side chain extend beyond thereof.

Claim 12 lacks antecedent basis for the recitation "the side chain" in claim 1 from which

claim 12 depends. Also, claim 12is indefinite in "the side chain… allows the compound or composition to be traced or detected" because it unclear how unmodified said chain allows the said compound or composition to be traced or detected.

Claim 14 recites "the side chain"; there is no antecedent basis for this recitation in claim 1 from which claim 14 depends. Also, claim 14 is indefinite because glycine residue has no side chain; and thus, glycine is not a member of the recited Markush group in the claim.

Regarding claim 17, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Also, claim 17 recites "the side chain"; there is no antecedent basis for this recitation in claim 1 from which claim 17 depends. Further, claim 17 is not clear in "preceded by, followed by, or otherwise attached to …" because it appears to lack "or" or "and" before "followed by".

Claim 19 recites ""a free, amidated, or esterified C terminus"; the recitation is unclear because lack "and" or "or" before "amidated".

Claim 20 recites "… of peptide…"; it is not apparent that whether or not said peptide is the peptide of claim 1 from which claim 20 depends. Suggest addition of "the" or "said" before "peptide". Also, claim 20 is not clear in the term "attached" because it ambiguously refers to covalently linked" or non-covalently attached".

Claim 22 recites "the full peptide" (line 5 of the claim); there is antecedent basis for the recitation in claim 20 and/or claim 1 from which claim 22 depends. Also, the "full peptide" is unclear as to whether or not it refers to full-length peptide or the peptide comprising all the chemical modifications set forth in the claims.

Claim 23 recites "a sequence of side chains"; the recitation is unclear because it ambiguously refers to a branched peptide chains, or an amino acid side chains of the peptide. Also, claim 23 recitation "homologous to" is unclear because it dubiously refers to structurally or functionally (e.g., binding to a natural amyloid peptide) analogous to the peptide consisting of SEQ ID NO:3. Given structurally homologous to, does it refer to sequence similar to SEQ ID NO:3, i.e., alignment of the sequences based on an amino acid conservation, or, regardless of primary sequence in comparison with SEQ ID NO:3, does it refer to a homologous to that is based on comparison of protein motif(s) or consensus sub-sequence(s).

Claim 25 recitation "or *instead of* ..." is indefinite because it is unclear regarding whether or not, contradictory to "*mimic* ...", the claimed compound or composition does not assemble *the* structure and action of said β-strand-forming section of peptide". Claim 25 is unclear in "backbone peptide groups" because it ambiguously refers to backbone NH group and/or backbone Oxygen of carboxyl group, or a peptide (branched) linked to the peptide backbone moiety. Also, claim 25 is not apparent in the recitation "side-chain groups ... of peptide" because it ambiguously refers to (i) branched peptide chains or (ii) amino acid side chains of the peptide. Suggest "side-chain groups of amino acid residues of ...the peptide". Further, claim 5 recites peptide (line8); the recitation is not apparent as to whether or not the said peptide is the claimed peptide in claim 1 from which claim 25 depends.

Claim 26 recites "*the backbone peptide groups ... replaced by*..."; the recitation is unclear because said "backbone peptide groups" vaguely refers to (i) backbone N-H group and/or backbone C=O group, or (ii) a peptide (branched) linked to any the peptide backbone moiety. Given referring to a peptide backbone N-H group and/or C=O group, is only "H" of

backbone N-H group or entire N-H group replaced; is only "O" of the backbone C=O group or entire C=O group replaced? Claim 26 is indefinite as being containing an open ended Markush group. See "... *SO_2O (sulphonate); and/or wherein*" (lines 7-8) wherein "and/or" renders the claim indefinite. Markush language requires close language. Claim 26 recites "*N-substituted backbone peptide groups*" (line 8) and also recites the said groups are replaced by an "*N- or C-substituted form*" (line 10); these recitations are indefinite because (i) it is unclear as to whether or not Said "N-substituted" is the same as "Nα-substituted" as recited in claim 1 from which claim 26 depends; and (ii) how the Nα-substituent in peptide backbone moiety (e.g., hydrogen of the backbone nitrogen) can be made from C-substitution (e.g., C-terminal substitution). Also, claim 26 is indefinite in the recitation "*N- or C-substituted form*" because it is unclear as to whether or not it refers to a substituted form at peptide backbone Nα or C=O moiety, or, N-terminus or C-terminus substituted form. In addition, claim 26 is indefinite in "... *one of the following groups: ...and/or...*" (lines 4 to 7), wherein "and/or" is not consistent with "one of the following groups"; note that "*one of the following group*" requires "and" but not "or" or "and/or". Further, claim 26 recitation "*having similar stereochemistry or arrangement... maintaining those particular features....*" is indefinite because the recitation is unclear as to (i) to what "similar stereochemistry" the claimed another group is compared; and (ii) whether or not the said particular features include: (*a*) the moiety alteration (e.g., substitution) of the peptide backbone with the claimed chemical groups in the claim; and/or (*b*) Nα-substitution(s) with the claimed chemical group(s) in the claim; and/or (*c*) having stereochemical property similar to amino acid side chains of the β-forming peptide segment (unmodified).

Claim Rejections - 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

The claims 1, 4-26 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Findeis, M. A. et al. (US Pat. No. 6610658).

Findeis et al. teach an β-amyloid modulator compound having structure depicted in Formula III (columns 13-14). The said compound has the features: (i) there at least are two parts, i.e., (*a*) the C-terminal section (Y-X_{aa1}-X_{aa2}) which comprises at least four consecutive α-D-amino acid residues, e.g., "LVFF" (see PPI-433, Table V) and are capable of forming β-stand because said β-amyloid modulator compound is designed based on and/or derived from the portion of β-amyloid peptide wherein said portion is β-stand(s), i.e., possesses ability of forming a β-strand; and (*b*) N-terminal section (Z-X_{aa1}'-X_{aa2}'-X_{aa3}'-) which comprises α-L-amino acids of ability of association with natural β-amyloid peptide (i.e., target β-strand); and (ii) in the C-terminal section, of the said α-D- amino acid residues, at least one of which is derivatized with

methylated amide linkage (see column 16, lines 51-53) or N-alkyl substitution (see column 17, lines 31-46), i.e., Nα-substitution. In *Example 11*, Findeis et al. has taught that the "LVFF" sequence can be further modified by Nα-methylation (a type of Nα-substitution). Thus, the above Findeis' teachings anticipate the instant claim 1.

Findeis et al. teach that the Nα-substitution introduces additional steric hindrance to the aggregation of natural β-amyloid when compounds of this type interact with natural β-amyloid (see column 20, lines 47-60), which is the subject matter of the current invention. The Findeis' teaching anticipates the instant claim 4.

Because the above-mentioned Nα-methylation is a modification of backbone Nα by methylene (CH_2) group, the above Findeis' teaching anticipates the instant claim 5.

The Findeis' β-amyloid modulator compound is designed based on a β-strand peptide of β-myeloid (see abstract and columns 2-3), i.e., the compound a β-strand-forming molecule. It is because this β-strand forming ability that the said compound can functions as an β-amyloid modulator, which underlines the modulator-mediated inhibition or prevention of β-amyloid aggregation. Thus, the Findeis' teaching anticipates the instant claim 6.

Since all amino acids of the Findeis' compound which participate in forming β-strands must have β-strand propensity ≥ 1.00, the above Findeis' teaching anticipates the instant claim 7.

In the Findeis' compound, the side chains of the amino acids are hydrophobic, e.g., leucine, valine and phenylalanine of the "LVFF" sub-sequence, which anticipates the instant claims 8-9.

Hindering the stacking of β-sheet is an intrinsic property of the claimed composition, i.e., the property is inherent in the composition, the above Findeis' teachings anticipate the instant claim 10.

Since the interaction between the target β-strand and the β-strand modulator compound is intermolecular, i.e., said chain interaction extends beyond the neighboring side chains within the β-strand modulator molecule, the above Findeis' teaching anticipates the instant claim 11.

In the "*Summary of the Invention*" section, Findeis et al. further teach that the modulator compound (modulating amyloid peptide aggregation) is modified to label the compound with a detectable substance (e.g., a radioactive label and fluorescein etc., see column 3, lines 50-52), which anticipates the instant claims 12-13.

In Example 1, Findeis et al. teach that the amino acid residues in the β-strand forming section are solid-phase synthesized, which anticipates the instant claim 14.

Findeis et al. teach that the target β-strands (natural β-amyloid) with which the Findeis' compound interacts is derived from Alzheimer' β-amyloid peptide (see columns 1-2), which anticipates the instant claim 15.

Findeis et al. teach that the core domain of a β-amyloid peptide (i.e., a target molecule) comprises amino acid residues 17-20 (i.e., LVFF) (see column 10, lines 34-40) with which the Findeis' compound interacts, which meets the limitation set forth in the instant claim 16.

Findeis et al. teach that the said compound is chemically modified to form a prodrug with enhanced transmembrane transport wherein modifications include covalent linking of a fatty acid to the modulator (see column 29, lines 32-42), which is applied to the instant claims 17-18.

Findeis et al. teach that the β-strand forming section of the compound has free N- and C-termini (see column 5, lines 40-45), which anticipates the instant claim 19.

Findeis et al. teach that the peptide composition is conjugated to a second peptide or protein (forming a chimeric protein) for enhancing transport across blood-brain barrier and said chimeric protein is transported across the barrier (see column 29, the last paragraph), which anticipates the instant claims 20-21.

Because in the above-mentioned chimeric protein, the Findeis' peptide composition links to the second peptide via amid bond (i.e., peptide bond), the above Findeis' teaching anticipates the instant claim 22.

Findeis et al. teach that the β-strand forming section comprises at least five amino acids (see Formula III and columns 13-16), which anticipates the instant claim 23.

Since the target β-strand (e.g., natural β-amyloid peptide) with which the Findeis' compound interacts, comprises a peptidic sub-sequence of "KLVFF" (see column 6, lines 51-60 and the patent SEQ ID NO:1), the above Findeis' teachings anticipate the instant claim 24.

Findeis et al. teach a peptidomimetic which mimics the structure and action of said β-strand forming section of the peptide composition (see columns 16-17) in addition to the β-strand forming section thereof (see "*A*" moiety of Formula III, column 13), which anticipates the instant claim 25.

Also, Findeis et al. teach that backbone of the said peptidomimetic compound is modified by CSNH (thioamide) which produces a backbone of -(C=S)-NH- (see column 17, lines 31-46), which anticipates the instant claim 26.

Further, Findeis et al. teach a pharmaceutical composition comprising the above-mentioned modulator compound (see column 29, lines 22-32), which anticipates the instant claim 41.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Wei Liu whose telephone number is 571-272-0949. The examiner can normally be reached from 9:00 a.m. to 5:00 p.m. on weekdays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber, can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 703 308-4242 or 703 872-9306 (official) or 703 872-9307 (after final). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

KAREN COCHRANE CARLSON, PH.D
PRIMARY EXAMINER

Samuel Wei Liu, Ph.D.

AU 1653, Patent Examiner

October 25, 2004